

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

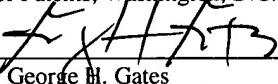
Applicant: David E. Simmen   
Serial No.: 09/669,556  
Filed: September 26, 2000  
Title: QUERY OPTIMIZATION TECHNIQUE FOR OBTAINING IMPROVED CARDINALITY ESTIMATES USING STATISTICS ON AUTOMATIC SUMMARY TABLES

Assignee: International Business Machines Corporation  
Examiner: Not assigned  
Group Art Unit: 2177  
Docket: ST9-99-184

**CERTIFICATE OF MAILING OR TRANSMISSION UNDER 37 CFR 1.8**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on

2/19/01

By:   
Name: George H. Gates

**REVOCATION AND POWER OF ATTORNEY**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Please revoke the existing Powers of Attorney, if any, and appoint the following attorneys and/or patent agents to prosecute this application and to transact all business in the U.S. Patent and Trademark Office in connection therewith:

Romualdas Strimaitis, Reg. No. 35,697; Prentiss W. Johnson, Reg. No. 33,123; Ingrid M. Foerster, Reg. No. 36,511; Gregory M. Plow, Reg. No. 43,005; Farrokh E. Pourmirzaie, Reg. No. 45,297; Christine H. Smith, Reg. No. 43,133; Christopher A. Hughes, Reg. No. 26,914; John E. Hoel, Reg. No. 26,279; Edward A. Pennington, Reg. No. 32,588; and Joseph C. Redmond, Jr., Reg. No. 18,753, all of whom are attorneys with I.B.M. Corporation;

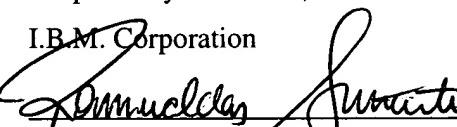
George H. Gates, Reg. No. 33,500; Victor G. Cooper, Reg. No. 39,641; Karen S. Canady, Reg. No. 39,927; William J. Wood, Reg. No. 42,236; Jason S. Feldmar, Reg. No. 39,187, and Bradley K. Lortz, Reg. No. 45,472, all of whom are attorneys with Gates & Cooper LLP.

Please direct all correspondence in this application to George H. Gates at:

Gates & Cooper LLP  
Howard Hughes Center  
6701 Center Drive West, Suite 1050  
Los Angeles, California 90045  
Telephone: (310) 641-8797

Respectfully submitted,

I.B.M. Corporation

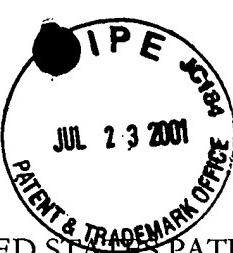
  
Name: Romualdas Strimaitis, Reg. No. 35,697  
Title: Senior Attorney, Intellectual Property Law

Dated: June 20, 2001  
Silicon Valley Laboratory  
555 Bailey Avenue J46/G4  
San Jose, California 95141-1003  
DG&C 30571.150-US-01

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S/N 09/669,556

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David E. Simmen  
Serial No.: 09/669,556  
Filed: September 26, 2000  
Title: QUERY OPTIMIZATION TECHNIQUE FOR OBTAINING IMPROVED CARDINALITY ESTIMATES USING STATISTICS ON AUTOMATIC SUMMARY TABLES

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CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation organized and existing under the laws of the State of Delaware, having a place of business at Armonk, New York 10504, certifies that it is the assignee of the entire right, title, and interest in the patent application identified above by virtue of:

An assignment from the inventor(s), David E. Simmen, to International Business Machines Corporation, of the patent application identified above. The assignment was filed in the United States Patent and Trademark Office on September 26, 2000, at Reel 011200, Frame 0200 (copy attached).

International Business Machines Corporation owns 100% interest in the above-identified patent application.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, as the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: June 20, 2001

By: Romualdas Strimaitis  
Name: Romualdas Strimaitis, Reg. No. 35,697  
Title: Senior Attorney, Intellectual Property Law

WJS/GDL



LBMSL 44520  
UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JANUARY 03, 2001

PTAS

PRETTY & SCHOEDER, P.C.  
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444 S. FLOWER ST., 19TH FLOOR  
LOS ANGELES, CA 90071



\*101506778A\*



UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/26/2000

REEL/FRAME: 011200/0200  
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

SIMMEN, DAVID E.

DOC DATE: 09/20/2000

ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES  
CORPORATION  
NEW ORCHARD ROAD  
ARMONK, NEW YORK 10504

RECEIVED  
Technology Center 2100  
27.1.2001

SERIAL NUMBER: 09669556  
PATENT NUMBER:

FILING DATE: 09/26/2000  
ISSUE DATE:

SHARON LATIMER, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

9/26/00

JUL 23 2001

11-07-2000

Stock No.: ST9-99-184

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

101506778

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

David E. Simmen

Additional names(s) of conveying party(ies)

3. Nature of conveyance:

- Assignment       Merger  
 Security Agreement       Change of Name  
 Other \_\_\_\_\_

Execution Date: September 20, 2000

2. Name and address of receiving party(ies):

Name: International Business Machines Corporation

Address: New Orchard Road

City: Armonk      State/Prov.: New York

Country: United States      ZIP: 10504

Additional name(s) & address(es)

Yes     No

4. Application number(s) or registration numbers(s):

091669556

If this document is being filed together with a new application, the execution date of the application is: September 20, 2000

Patent Application No.      Filing date

To Be Assigned      September 25, 2000

B. Patent No.(s)

Additional numbers

Yes     No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name : Janaki Komanduri, Esq.

Registration No. 40,684

Address: Pretty & Schroeder, P.C.

444 S. Flower St., 19th Floor

City: Los Angeles      State/Prov.: California

Country: United States      ZIP: 90071

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

- Enclosed - Any excess or insufficiency should be credited or debited to deposit account  
 Authorized to be charged to deposit account

8. Deposit account number:

09-0460

11/05/2000 GTOH11 00000213 090460 09669556

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Janaki K. manduri

Janaki Komanduri

Name of Person Signing

Signature

September 26, 2000

2

Date

Total number of pages including cover sheet, attachments, and

ASSIGNMENT

Docket No. ST9-99-184

INVENTOR  
AND CITY(1) David E. Simmen  
County of Santa Claraof San Jose,  
and State of California

has invented certain improvements in

TITLE A QUERY OPTIMIZATION TECHNIQUE FOR OBTAINING IMPROVED CARDINALITY ESTIMATES  
USING STATISTICS ON AUTOMATIC SUMMARY TABLESDATE THAT  
INVENTOR  
SIGNED THE  
DECLARATION and executed, respectively, a United States patent application therefor on  
(1) Sept 20, 2000.

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed

CITY

(1) at San JoseDavid E. Simmen

SIGNATURE

DATE

on Sept. 20, 2000

DAVID E. SIMMEN

INVENTOR